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# Chapter XIII

(Orig.)

#### NAVY AIR

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# Chapter XIII

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#### NAVY AIR

### 130. General Description

Bulgaria has no Naval Air Force. Seaplanes are operated by the Army Air Force. (See Chapter XI.)

### 131. Seaplane Bases

#### A. Varna Naval Dockyard (seaplane alighting area).

Coordinates: 43° 11′ 40″ N; 27° 55′ 37″ E.

Altitude: Sea level.

Magnetic variation: 1° 15′ E (1943), annual change: 5′ E.

Reference: Fig. XIII - 1, opposite.

(1) Local position and landmarks. The alighting area is in Varna Bay, at the northwestern head of which is the town of Varna.\*

#### (2) Obstructions.

- (a) Hill, 1,000 feet, 3.5 miles N.
- (b) Mt. Galata, about 330 feet, 1 mile SSE.
- (c) The lighthouse at Galata Burnu (Cape Galata) is 213 feet above sea level.
  - (d) Varna harbor breakwater.
- (e) A jetty running ESE from a point at the southern end of the canal is submerged for approximately half its length.
- (f) In the southern part of Varna Bay, about 4,800 feet NW of Galata Burnu (Cape Galata), is an area of foul ground with two shoals having depths of three and one-half to four and one-quarter fathoms (21-25.5 feet); other rocks with depths of four and one-quarter fathoms (25.5 feet) lie within a distance of about 1,200 feet from these two shoals. These shoals are so small that it is possible that the least depths over them have not been ascertained. The nature of the bottom in their vicinity appears to be rock, thinly covered with sand
- (3) Dimensions. Protected runs are available:
  - (a) For one nautical mile in an E-W direction.
  - (b) For one and three-quarter nautical miles in a NE-



Illustration XIII-1. Varna Naval Dockyard, Seaplane Alighting Area.

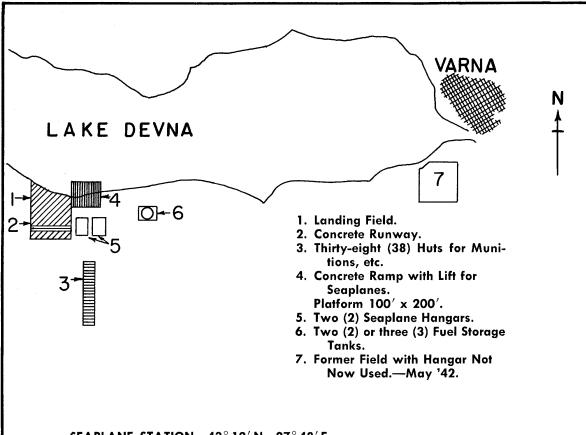
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<sup>\*</sup>See Appendix I for all spellings of features. Cities and towns mentioned in this Chapter are spelled in accordance with G.S.,G.S. maps, 1:250,000, Series No. 4088 or G.S.,G.S. maps, 1:500,000, Series No. 4072, where the former does not cover. The names of other maritime features are spelled in accordance with B.A. and H.O. charts. Variants follow in parentheses.



#### PEINDRDJIK SEAPLANE STATION

FIGURE XIII - 2



#### SEAPLANE STATION-43° 12′ N. 27° 48′ E.

PEINDRDJIK (or CHAIKA) Seaplane Station: About five (5) miles West of VARNA, on the Southern shore of LAKE DEVNA. A well-equipped seaplane station with at least three (3) hangars, workshops, slipway and platform  $(600' \times 300')$  and a lift for hauling the planes from the water. There are also barracks, underground petrol tanks and W/T station. It is under German control and from 15 to 20 German seaplanes used in coastal patrol are usually there. The lake affords an ideal alighting area in most weather.

Source—H.Q., R.A.F., M.E., Cairo



SW direction between the quarantine anchorage and Cape Sveti Dimitri. This run would probably be useful in cases of NE or SW winds.

- (4) Sea conditions and anchorages. The bay is spacious, with good holding ground composed of mud and sand. It is well sheltered from southerly, westerly and northerly winds, but open to easterly winds, which it is said, seldom affect the alighting area. Depths range from ten to five fathoms (60–30 feet), the latter being found from 400 to 1,000 yards from shore all around the bay. The best anchorage is reported east of the eastern breakwater in depths of about seven fathoms (42 feet).
  - (5) Slipway. There is one slipway near the seaplane hangar.
  - (6) Facilities.\*
  - (a) Fuel and oil. No stocks are maintained.
- (b) Water. Good water may be obtained from hydrants on the quays.
- (c) Telephone, W/T etc. Radio and telegraph stations are at Varna. In the courtyard of the Varna naval barracks on the western shore of the harbor is a wireless station.
- (d) Hangars and workshops. One hangar accommodates four seaplanes. Small repairs to machinery may be made at the state railway repair shops.
- (e) Jetties, quays and cranes. The northern quay, on which there is a ten-ton crane, is connected to the general railway system; there is also a 40-ton steam floating crane in the harbor. This is probably the floating crane that is sometimes reported at Burgaz (Burghaz) harbor.
- (7) Access. The town is connected with the general railroad system.
- (8) Meteorological conditions. See Varna, Meteorological Data, Table XIII 1.

#### B. Peindrdjik Seaplane Station.

Coordinates: 43° 11′ 05″ N; 27° 51′ 05″ E (approx.). Altitude: Sea level.

Magnetic variation: 1° 15′ E (1943), annual change: 5′ E. Reference: B.A. chart 2230, 1st edition, small corrections to 1943; Fig. XIII - 1; Fig. XIII - 2, opposite.

- (1) Local position and landmarks. The seaplane station at Peindrdjik is on Lake Devna, W of the central southern shore. Lake Devna is immediately W of Varna. A canal with a depth of 16 feet connects the harbor and the lake.
  - (2) Obstructions. Town on E, hills on all other sides.
- (3) Dimensions. About five and one-half miles in an E-W direction; one-half to one mile in N-S direction.
- (4) Sea conditions and anchorage. Lake Devna (Devno) forms an ideal operating base for seaplanes and flying-boats as it is very seldom rough and has no surface obstructions.

Depth of water: five to ten fathoms (30 to 60 feet) with indications of depths down to one fathom along eastern and southeastern shore.

- (5) Slipways. One slipway.
- (6) Facilities.
- (a) Fuel and oil. Two or three gasoline storage tanks are E of the base.
  - \*See Chapter VIII.

- (b) Telephone, W/T, etc. At Chaika airdrome, near Peindrdjik, is a wireless station.
- (c) Hangars and workshops. There are three seaplane hangars and some workshops.
- (d) Ammunition. South of the hangars there are reported to be 38 huts for ammunition storage, etc., containing among other things, three cars or trucks of bombs. Two of these huts are for the storage of aerial torpedoes.
  - (e) Accommodations. There are living quarters.
- (f) Jetties, quays and cranes. A cement ramp and platform 600 x 300 feet has a small crane and a lift for scaplanes.

Remarks: One reliable source reported in January 1943 that this seaplane base is not now in use, that the buildings are being used by the personnel of the Chaika airdrome nearby.

Another reliable source reported that early in April 1942 the following seaplanes were identified at Peindrdjik: five Dornier monoplanes, two old biplanes and one three-engined Dornier flying-boat.

#### C. Gulf of Burgaz (potential seaplane alighting area).

Coordinates: 42° 30′ N; 27° 35′ E.

Altitude: Sea level.

Magnetic variation: 2° 05′ E (1943), annual change: 9′ E. Reference: Fig. XIII - 3.

- (1) Local position and landmarks. The potential alighting areas are in the Gulf of Burgaz (Burghaz), at the western head of which is the town of Burgaz.
- (2) Obstructions. Hills closely gird the gulf on all three shores.
- (3) Dimensions. There are three potential alighting areas in the Gulf of Burgaz:
- (a) Chingani (Chengene Skele) Bay. 1.7 miles in an E-W direction; 1.4 miles in a N-S direction.
- (b) Burgaz Bay. 1.8 miles in a NNW-SSE direction; 1.2 miles in an E-W direction.
- (c) Burgaz Gulf as a whole: Seven miles N-S; eight miles E-W. (Measurements are from innermost part of Chingani Bay northward and from innermost part of Burgaz Bay eastward.)

#### (4) Sea conditions.

- (a) Chingani Bay. Reported sheltered from all winds. Depth: About eight fathoms (48 feet) greatest depth and from two to three fathoms close to shore. At the head of the bay a rivulet has formed a mudbank of one and one-half fathoms (nine feet) about 400 yards from shore. Bottom: mud.
- (b) Burgaz Bay. Open to eastward; winds from that quarter throw in a heavy swell and short sea when shelter must be sought in Chingani or Poros (Foros) Bay. Depth: five and one-quarter to one and one-quarter fathoms (31 to 7.50 feet). Bottom: no information.
- (c) Burgaz Gulf: Open to eastward. Depth: From 12 to one fathom (72 to six feet). There are shoals but all have at least two fathoms (12 feet) except SE Ankhelu (Ahillo) Reef which is one-half mile southeast of Ankhelu Point (Pomoriye). Anastasia (Sveta Anastasiya) Island, one mile northeast of Sukala Point (Nos Sveta Anastasiya) at the eastern entrance to Chingani Bay, is encircled by some dry rocks off the southern end.



(5) Anchorages. The best anchorage is close to the eastern shore of Chingani Bay. This area is sheltered from all winds, has adequate depth, a mud bottom and good holding ground. The next most satisfactory anchorage seems to be at Poros Bay, the southernmost part of Burgaz Bay. North of Poros Point (Nos Foros) a rocky reef extends two cables (one-fifth mile). Within its entrance the bay shoals rapidly and a sand flat extends about half a mile off its head.

#### (6) Facilities.\*

- (a) Water. Water is available at Burgaz. A rivulet of good water empties into head of Chingani Bay.
  - (b) Telephone, W/T, etc. A telegraph station is at Burgaz.
  - (c) Hangars and workshops. No information.
  - (d) Night landing facilities. No information.
- (e) Accommodations. In addition to the city of Burgaz, some sheds and storehouses stand near the rivulet at the head of Chingani Bay. At Burgaz a public hospital has 120 beds.
- (f) Jetties, quays and cranes. At Burgaz are a 7-ton and a 12-ton crane, also a floating crane of 40 tons which is sometimes moved to Varna.
- (7) Access. Burgaz is on the main railroad line between Istanbul (Constantinople) and Plovdiv (Philippopolis).

\*See Chapter VIII.

- (8) Meteorological conditions. In the Gulf of Burgaz, toward midnight, the wind rises from the NW, freshens until sunrise and falls toward noon, veering through NE to SE. In the afternoon it freshens from SE and falls toward sunset, veering through S and W to NW.
- (9) Remarks. Several closed bodies of water near Gulf of Burgaz may be available for seaplane alighting but little information is available as to depth of water, etc. Akrianu Geul (Lake Mandrensko), south of Poros Bay, is long and narrow with a length of about three and one-third miles in a NE-SW direction, with a greatest width of about one-third mile in an E-W direction. Its depths are from three to four feet. It is surrounded by hills except to the NE and possibly SW. Directly W of Burgaz harbor, Lake Vava-koi (Burgaz Liman or Muris Geul) has a length of four and one-half miles E-W and a greatest breadth of two and one-third miles N-S. Depths of about three or four feet occur at the eastern end. Hills surround the water except to the SE. Athanas Geul (Lake Atanaskoi), N of Burgaz harbor, is four and one-half miles long NNW-SSE but only about one-quarter mile wide at its center.

Ankhelu (Ahillo) Geul, NW of Ankhelu Point, is two miles long N-S, and less than a mile wide E-W at any point.

TABLE XIII - 1 Varna, Meteorological Data. (1869-1874, 1900-1915)

Month	Bar	Barometer, at 32° F., mean sea level, lat. 45° Air temperat							rature			, A		Rain				Wind								gales	sgoj		
	Mean		Extreme			Mean			Extreme			humidity	ess.		Jo	m fall	force, rt scale	Number of days from—									of days	of days	
	For month	Daily	Maxi- mum	Mini- mum	Range	For	Maxi- mum	Mini- mum	Range	Maxi- mum	Mini- mum	Range	Relative	Cloudiness. Scale 0 to 10	Total fall	Number of days	Maximum fall in 24 hours	Mean fo Beaufort	ż	NE.	ы	SE.	s,	SW.	W.	NW.	Calm	Number	Number of
January February March April May June July August September October November December	in. 30.17 30.05 30.02 29.97 29.98 29.91 29.92 29.96 30.07 30.10 30.08 30.08	in.	in. 31.37 29.83 30.62 30.50 30.36 30.27 30.33 30.33 30.50 30.59 30.74 30.65	in. 29.29 29.35 29.23 29.35 29.32 29.47 29.56 29.68 29.44 29.18 29.15	1.39	° F. 33 37 42 50 60 68 72 72 64 56 46 40	° F. 40 45 48 58 69 77 83 84 77 67 54 46	° F. 26 32 35 43 52 59 63 62 56 50 39 34	° F. 14 13 13 15 17 18 20 22 21 17 15 12	° F. 65 74 74 91 96 91 96 103 92 89 76 70	° F. -3 +6 16 29 34 46 51 50 34 27 13 8	° F. 68 68 58 62 62 45 45 53 58 62 63 62	P.ct. 79 79 78 73 75 77 72 70 72 78 78 82	6 7 7 6 5 5 3 2 4 6 7	in. 1.38 1.15 1.07 1.47 1.64 3.09 1.80 1.47 1.48 2.00 2.00 1.45	9 9 8 9 9 11 7 4 5 7 8 9	in. 1.14 1.74 .93 1.31 1.54 1.58 3.87 2.92 3.54 2.23 2.58 1.34	3.4 3.1 2.9 2.7 2.4 2.3 2.6 2.5 3.0 3.1 3.2 3.3	4 4 4 2 2 3 3 4 5 5	3 3 4 3 2 2 2 2 2 2 3 3 4 2	3 5 6 8 8 6 4 5 4 4 3 3	1 2 3 3 4 3 4 4 4 4 4 3 2 2	1 1 1 1 1 1 1 1 1	2 2 1 1 2 2 2 2 2 1 2 1 2	7 4 4 4 5 6 6 5 5 5 6 7	6 3 4 2 2 3 3 4 4 5 7	4 4 4 5 5 6 6 4 4 3 3	2.5 1.7 1.0 1.5 .5 .7 1.1 .8 .3 1.0 1.4 2.2	2.8 4.4 4.6 2.5 1.1 .5 .5 .9 2.5 3.6 3.4 4.2
Mean Total Extreme values	30.02		31.37	29.15	2.13	53	62	46	16	103	 -3	106	76 	5	20.00	95	3.87	2.9	 44	33	 59	35	12	20	64	46	52	147	31.0
Number of years observa- tions	11			11		15 11				1	.5		11	15 8 14						_			1	1					

Observation point: 43° 12′ N, 27° 55′ E, elevation 115 ft. (35.1 m.). Hours of observation, 7 a.m., 2 p.m., 9 p.m. Authorities: Constantinople, Observatoire Imperiale, Bulletin Meteorologique et Sismique. Sofia, Institut Meteorologique de Bulgarie, Annuaire 1900-1910, Bulletin Mensuel 1911-1915.

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